

(19) KOREAN INTELLECTUAL PROPERTY OFFICE

KOREAN PATENT ABSTRACTS

(11)Publication number: 1020040104936 A
(43)Date of publication of application: 13.12.2004(21)Application number: 1020040040894
(22)Date of filing: 04.06.2004
(30)Priority: 04.06.2003 KR 1020030035993(71)Applicant: BIOLEADERS CORPORATION
BIOLEADERS JAPAN CORP.
KOREA RESEARCH
INSTITUTE OF BIOSCIENCE
AND BIOTECHNOLOGY
M.D. LAB(72)Inventor: BOO, HA RYEONG
CHOI, JAE CHEOL
HONG, SEUNG PYO
JUNG, CHANG MIN
KIM, CHEOL JUNG
KIM, GWANG
LEE, JONG SU
SHUNICHI, KURODA
SUNG, MUN HUI

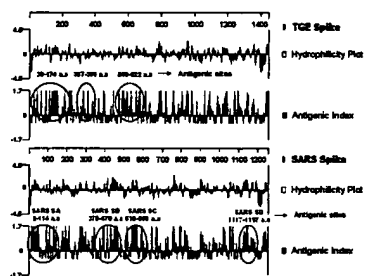
(51)Int. Cl. C12N 15/86

(54) CELL SURFACE EXPRESSION VECTOR OF SARS VIRUS ANTIGEN AND MICROORGANISM TRANSFORMED THEREBY
USEFUL IN PRODUCTION OF VACCINE FOR PREVENTION OR TREATMENT OF SARS

(57) Abstract:

PURPOSE: A cell surface expression vector of SARS virus antigen and a microorganism transformed thereby are provided. The transformed microorganism and antigen protein produced therefrom are useful in the production of a vaccine for the prevention or treatment of SARS.

CONSTITUTION: The cell surface expression vector of SARS virus antigen comprises one or more than two genes selected from genes encoding polygammaglutamic acid synthetase complex, pgsB, pgsC and pgsA; and a gene encoding a spike antigen protein of SARS coronavirus or a nucleocapsid antigen protein, wherein the spike antigen protein is SARS SA, SARS SB, SARS SC or SARS SBC; the nucleocapsid antigen is SARS NA, SARS NB or SARS NI; and the expression vector is pHCE2LB:pgsA-SARS SA, pHCE2LB:pgsA-SARS SC or pHCE2LB:pgsA-SARS SBC. The transformed microorganism is produced by transforming with the cell surface expression vector of SARS virus antigen, wherein the microorganism is selected from Escherichia coli, Salmonella typhi, Salmonella typhimurium, Vibrio cholera, Mycobacterium bovis, Shigella sp., Bacillus sp., lactic acid bacteria, Staphylococcus sp., Listeria monocytogenes and Streptococcus sp.



COPYRIGHT KIPO 2005

Legal Status

Date of final disposal of an application (20050112)

Patent registration number (1004699360000)

Date of registration (20050105)